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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,804	01/21/2005	Jacobus A Rozendaal	SFM-0001-US	3801

59115 7590 04/11/2007  
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EXAMINER
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MCGOWAN, JAMIE LOUISE

ART UNIT	PAPER NUMBER
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3671

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/521,804

Applicant(s)

ROZENDAAL ET AL.

Examiner

Jamie L. McGowan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 51-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 51-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/21/2005</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 51, and 59-70 are rejected under 35 U.S.C. 102(b) as being anticipated by Bourgault (6,216,616).

Regarding claim 1, Bourgault discloses a tillage implement comprising:

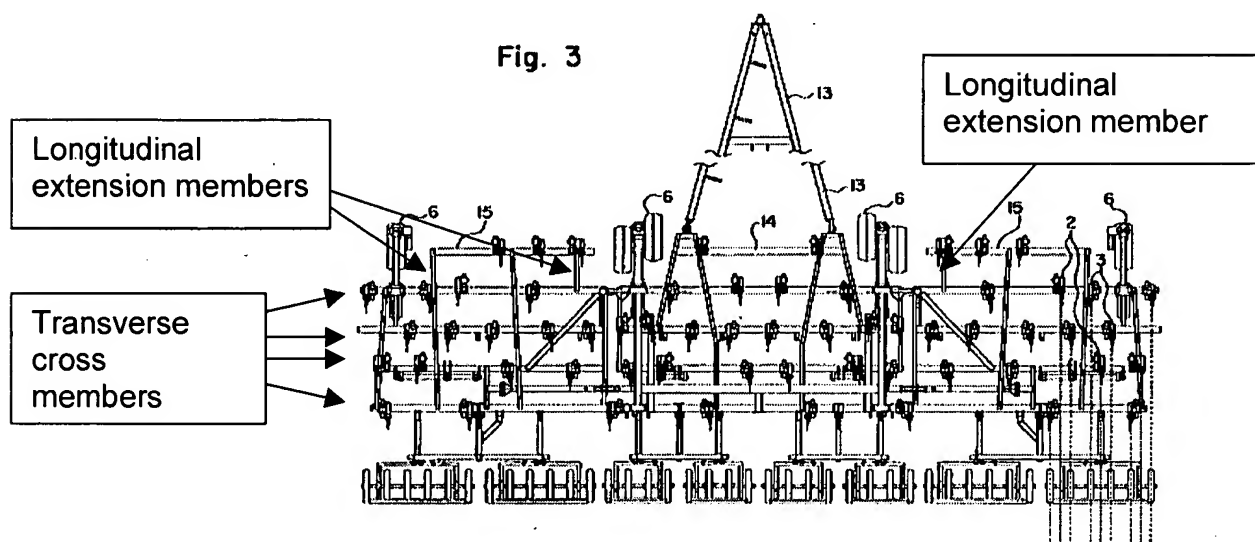
- A frame having three or more longitudinally spaced apart transverse cross members (7)
- A plurality of individual coulter wheel assemblies (2,3)
- A mounting means (23) for each individual coulter wheel assembly (2,3)
- Three or more longitudinally spaced apart rows of laterally spaced apart individual coulter wheel assemblies, each coulter wheel assembly (2,3) removably mounted on the frame using the mounting means (23), a coulter wheel assembly (2,3) in a given row being staggered with respect to the coulter wheel assemblies (2,3) in a longitudinally adjacent row (Figure 3)

Regarding claim 59, each row further comprises removable individual field working tools (18).

Regarding claims 60 and 61, the individual coulter wheel assemblies (2,3) and individual field working tools (18) in a given row are staggered with respect to all coulter wheel assemblies and field working tools in longitudinally adjacent rows of the implement (Figure 3).

Regarding claim 62, the coulter wheel assemblies are laterally adjustable by arranging them in different configurations (column 4 lines 17-27).

Regarding claims 63 and 64, the coulter wheel assemblies are mounted on the transverse cross-members and one or more are mounted to the transverse cross members by longitudinal extension members (See Figure 3 below).



Regarding claims 65 and 66, there are a plurality of transverse cross-members for a given row aligned along a common transverse axis (Figure 3).

Regarding claim 67, the rows consist of laterally spaced apart coulter wheel assemblies (Figure 3).

Regarding claim 68, the apparatus discloses the kit except for a set of instructions; however, the examiner takes OFFICIAL NOTICE that anything that comes disassembled in a kit would also come with a set of instructions for reassembly.

Regarding claim 69, Bourgault discloses a stilt means (39) for increasing the height of the cultivator frame relative to ground level (column 2 lines 26-29).

Regarding claim 70, the apparatus discloses the method.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 52-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourgault (6,216,616) in view of McIlhargey (6,412,571) (cited by applicant).

Regarding claims 52-55, Bourgault discloses the invention as described above in Paragraph 2. Bourgault fails to disclose a device that allows the coulter wheel assemblies (2,3) to deflect upwardly when it impacts an obstacle. Like Bourgault, McIlhargey discloses a coulter wheel assembly. Unlike Bourgault, McIlhargey discloses a device that responds to obstacles by deflecting upwardly. McIlhargey's coulter wheel assembly comprises a spring about which the coulter wheel assembly can deflect when an obstacle is encountered. The coulter wheel assembly rotates upwardly about a horizontal spring axis when an obstacle is encountered. The spring (4) has upper and lower shank ends (2 and 3) extending tangentially therefrom wherein the lower shank (3) deflects upwardly about the horizontal spring axis in response to impact with an obstacle. McIlhargey teaches that this arrangement provides superior shock loading characteristics (column 1 lines 38-39) and maintains more constant ground working conditions (column 2 lines 46-53). Given the teaching of McIlhargey, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the coulter wheel assembly of McIlhargey in the tillage implement of Bourgault

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to provide optimal soil penetration depth and uniformity and reducing the chance of damage when encountering an obstacle.

5. Claims 56-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourgault (6,216,616) in view of Rawson (5,462,124).

Regarding claims 56-58, Bourgault discloses the invention as described above but fails to disclose that the coulter wheel assemblies can pivot around a vertical axis. Like Bourgault, Rawson also discloses a coulter wheel assembly. Unlike Bourgault, Rawson further discloses that the coulter wheel assemblies can pivot about a vertical axis through the use of a vertically extending hollow strut (42) having a pair of opposed horizontal slots (43) therethrough and a shank with a horizontal hole, wherein the shank (31) is secured within the hollow strut (42) by means of a horizontal pin (44) extending through the slots (43) and the hole, thereby permitting rotational movement of the shank (31) within the hollow strut about the vertical axis (See Figure 5 for pin (44) extending all the way through hollow strut (42) and shank (31)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the pivoting structure of Rawson in the device of Bourgault to allow the coulter wheel assembly to pivot to prevent breakage and avoid damage in the event that an obstacle is encountered while working a field.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamie L. McGowan whose telephone number is

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(571)272-5064. The examiner can normally be reached on Monday through Friday 8:00 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on (571)272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jamie L. McGowan  
April 4, 2007



**Thomas B. Will**  
**Supervisory Patent Examiner**  
**Group 3600**